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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,154	03/02/2004	Richard A. Cardemon	1416-32	3163

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EXAMINER

HOWELL, DANIEL W

ART UNIT	PAPER NUMBER
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3722

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/791,154

Applicant(s)

CARDEMON ET AL.

Examiner

Daniel W. Howell

Art Unit

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-34, 42-44, 60-65 and 80-92 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 21, 22, 24, 25, 27, 30, 31, 33, 34, 42, 43, 60, 61, 63-65, 80 and 87-92 is/are rejected.
- 7) ☒ Claim(s) 23, 26, 28, 29, 32, 44, 62 and 81-86 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11-22-05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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1. The use of the trademark TEFLON™ has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

2. Claim 80 needs a period at the end. On line 2 of claim 89, “biasing” should be properly spelled.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 30, 31, 33, 34, 42, 60, 61, and 63 are rejected under 35 U.S.C. 102(b) as being anticipated by LaForge et al (3755868). Coupling element 2, 20, has a radial slot which contains adjustable tool holder 5. Note replaceable cutting tool 6. Wedge 25 is used to move the cutting tool radially. As the radial adjustment is made, springs 31 act to increase the friction between the contact surfaces 15, 21, of the coupling element and tool holder. With reference to figure 4, as the member 20 is moved downward in the figure, the position and force of the spring on the tool holder 5 will change. Also, tightening or loosening the screw 30 will change the position and force of the spring 31. Both of these situations change the frictional forces between the coupling element and tool holder. Regarding claim 63, surfaces 11, 12, and 13 are considered to be a pocket.

5. Claims 21, 22, 27, 30, 31, 33, 34, 42, 60, 61, 63-65, 80, 87, and 89-92 are rejected under 35 U.S.C. 102(b) as being anticipated by Schultschik (4551044). Tool holder 3 has a cutting tool 13, and it is radially movable on coupling element 4. Movable member 16, 19, is biased in the rearward direction by two springs 24, 25. The tool holder 3 is moved radially by the conventional threaded spindle 17. During machining, contact surfaces 14, 15, of the tool holder and coupling element are tightly held together since springs 24, 25, push the movable member rearward. When it is desired to move the tool radially, fork 33 presses against bolts 28, in order to overcome the force of spring 24, thereby reducing the friction between surfaces 14, 15. Note that spring 25 holds surfaces 14, 15, together when fork 33 pushes against the bolts (column 3, lines 16+). After the tool holder has been moved radially, fork 33 is removed, the movable member is moved backwards to reengage surfaces 14, 15, and the tool holder is tightly secured in the adjusted position in order to continue the machining operation. Regarding claim 80, it is noted that a simple linear surface can serve as a bearing. Looking at figure 1, the opening in member 7 which guides the axial movement of member 16 along axis 31 is a bearing.

6. Claims 21, 22, 27, 30, 31, 33, 34, 42, 43, 60-61, 63-65, and 87-92 are rejected under 35 U.S.C. 102(b) as being anticipated by Ollearo (3715167). Tool holder 16 is guided radially/laterally in a slot 15 in coupling element 13. As seen in figures 3 and 4, the tool holder has a T-slot 32 which contains a movable member 27, 31. The movable member is urged to the left of figure 3 by springs 25 in pocket 24, in order to provide a frictional force great enough to prevent movement of the tool holder in slot 15 during machining. As seen from figure 6, pushing roller 43 laterally moves a rack 38, which rotates gear 36, causing the gear to move axially in threads 34, in order to push the movable member against the bias of the springs 25.

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This permits head 31 to decrease its frictional force against the T-slot 32, such that the tool may be moved radially. The tool holder has a roller 54 which contacts surface 57 to adjust the location of the cutting tool 19, in conjunction with the operation of springs 50 and the movement of the spindle (column 3, lines 37+). Regarding claim 43, the gear 36 is considered to be a pivotable cam, and axial movement of this cam causes compression of the spring 25.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schultschik in view of Noa (3877329). The movable member 16 is moved against the bias of springs 24 by mechanical means, such that it lacks any hydraulic means. Figures 3 and 7 of Noa shows a similar clamping system. Tool holder 62 is held in place by engagement with a clamp piece 60 having an inclined contact 61, which is analogous to the surfaces 14, 15 of Schultschik. The clamp piece is biased to the gripping position by springs 58 which bias against a piston 57. Fluid is provided on the side of the piston opposite the springs to bias against the springs and reduce the clamping force on the tool holder 62. It is considered to have been obvious to have provided Schultschik with the hydraulic piston system as shown by Noa in order to simplify the structure by eliminating the elements necessary to keep the fork 33 from striking the coupling element and damaging it.

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9. Claims 23, 26, 28, 29, 32, 44, 62, and 81-86 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Any inquiry concerning the content of this communication from the examiner should be directed to Daniel Howell, whose telephone number is 571-272-4478. The examiner's office hours are typically about 10 am until 6:30 pm, Monday through Friday. The examiner's supervisor, Boyer Ashley, may be reached at 571-272-4502.

In order to reduce pendency and avoid potential delays, Group 3720 is encouraging FAXing of responses to Office actions directly into the Group at FAX number to 571-273-8300. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Daniel Howell of Art Unit 3722 at the top of your cover sheet.



Daniel W. Howell
Primary Examiner
Art Unit 3722